

REMARKS

This application includes claims 1-33. Claims 23 and 29 have been amended. No new matter has been introduced. Reconsideration is respectfully requested.

Applicant thanks Examiner Pathak for the courtesy of an interview with Applicant's representative, Daniel Kligler (Reg. No. 41,120), held in the USPTO on May 22, 2006. At the interview, Dr. Kligler explained that the language regarding the PMMS target margin on page 38 in ETSI standard TS-101 v1.1.2, which was cited by the Examiner, was based on a contribution by the Applicant in this case himself, and questioned whether this same language appeared in the earlier v1.1.1 version of the same standard. Neither the Examiner nor Applicant was able to produce a copy of the earlier version. It was agreed that the Examiner would attempt to provide the earlier version and, to the extent that it does not contain the same language regarding the PMMS target margin, the rejection of independent claims 1 and 12 over ETSI would be withdrawn. Applicant also agreed to provide a declaration proving that similar language appearing in ITU document CF-042R3 was contributed by Applicant, and therefore could not be considered prior art against the present patent application. Finally, it was agreed that if independent claims 23 and 29 were amended to include an explicit definition of "bit loading" in terms of bits/symbol, the amended claims would distinguish over McHale et al. (U.S. Patent 6,385,203).

The present patent application claims the benefit of U.S. Provisional Patent Application No. 60/261,118, filed January 11, 2001. In the interview, the Examiner pointed out that ITU Temporary Document CF-042R3, entitled "G.shdsl: Proposed PMMS Target Margin" (which was submitted by Applicant in an IDS) is

dated "08-12 January 2001" and thus could be considered prior art against the present patent application under 35 USC 102(a). This document states that "If both worst-case target margin and current-condition target margin are specified, then the capabilities exchanged shall be the intersection of data rates calculated using each noise condition separately." As agreed in the interview, Applicant submits herewith a declaration under 37 CFR 1.132 by Ilan Reuven, who is listed as one of the "contacts" on the document in question, proving that the statement above was actually included in the document on the basis of a suggestion contributed by the Applicant himself. Therefore, the subject matter cited by the Examiner in this document does not meet the statutory requirement of 35 U.S.C. 102(a) that the invention was "described in a printed publication... before the invention thereof by the applicant." Use of a declaration under 37 CFR 1.132 for this purpose is mandated by MPEP 716.10.

Claims 1-3, 5, 6, 8, 9, 12-14, 16, 17, 19 and 20 were rejected under 35 U.S.C. 103(a) over information given in the Background section of the present patent application (referred to by the Examiner as "Applicant Admitted Prior Art (AAPA)"), in view of ETSI standard TS-101 524 v1.1.2 (August, 2001). As pointed out in the interview, the August, 2001, publication date of ETSI v1.1.2 is later than the filing date of U.S. Provisional Patent Application No. 60/261,118, from which the present patent application claims priority. Therefore, ETSI v1.1.2 is ineffective as prior art against the present patent application.

The Examiner wrote in the present official action that ETSI v1.1.2 "assumes the same subject matter" as an earlier version of the ETSI standard, v1.1.1, published June, 2000. On the basis of the facts stated in the above-mentioned declaration under 37 CFR 1.132, however, Applicant believes the Examiner's

statement regarding v1.1.1 to be incorrect with respect to the subject matter of v1.1.2 (particularly PMMS Target Margin, page 38) that the Examiner cited against the claims in the present patent application. Applicant respectfully requests that the Examiner provide a copy of v1.1.1 and point out the language in v1.1.1 of relevance to the claim limitations, or else withdraw this rejection.

On the basis of the points explained above, independent claims 1 and 12 are believed to be patentable over the cited references. In view of the patentability of claims 1 and 12, dependent claims 2, 3, 5, 6, 8, 9, 13, 14, 16, 17, 19 and 20 are also believed to be patentable.

Claims 4, 7, 10, 15, 18 and 21 were rejected under 35 U.S.C. 103(a) over AAPA in view of ETSI and further in view of Polley et al. (U.S. Patent 6,363,109), while claims 11 and 22 were rejected under 35 U.S.C. 103(a) over AAPA in view of ETSI and Polley and further in view of McHale (mentioned above). In view of the patentability of independent claims 1 and 12, as explained above, dependent claims 4, 7, 10, 11, 15, 18, 21 and 22 are also believed to be patentable.

Claims 23-33 were rejected under 35 U.S.C. 103(a) over AAPA in view of McHale. Applicant has amended independent claims 23 and 29, as agreed in the interview, in order to clarify the distinction of the claimed invention over the cited art. Claims 23 and 29 recite a method and apparatus in which single-carrier signals are transmitted over a communication channel in upstream and downstream directions with transmission spectra that are at least partly mutually overlapping. Different, upstream and downstream bit-loading rates are set for the upstream and downstream directions, responsive to conditions on the channel. Claims 23 and 29 have been amended to clarify that the bit-

loading rates are expressed in bits/symbol, as stated in the specification, for example, on page 6, line 31 - page 7, line 4.

McHale describes a method for "training a line" (cols. 30-31 and Fig. 20), but refers to multi-carrier (DMT) signals, not single-carrier signals as required by claims 23 and 29. Furthermore, McHale's method is based on the conventional approach of modifying the baud rate, as illustrated in steps 882 and 892 in Fig. 20. In other words, McHale modifies the number of symbols/sec, rather than the number of bits/symbols as required by amended claims 23 and 29. Therefore, as agreed in the interview, the amended claims are patentable over the cited art.

In view of the patentability of independent claims 23 and 29, dependent claims 24-28 and 30-33 are also believed to be patentable.

Applicant has studied the additional references made of record by the Examiner and believes the claims in this application to be patentable over these additional references, as well, whether the references are taken individually or in any combination.

Applicant believes the amendments and remarks stated above to be fully responsive to all of the grounds of rejection raised by the Examiner. In view of these amendments and remarks, all of the claims now pending in this application are believed to be in condition for allowance. Prompt notice to this effect is respectfully requested.

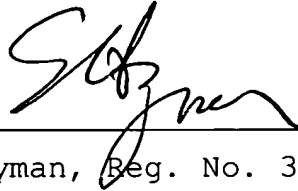
If there are any fees due in connection with the filing of this response, please charge those fees to our Deposit Account No. 02-2666. If a telephone interview would expedite the prosecution of this Application, the Examiner is invited to contact the undersigned at (310) 207-3800.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Dated:

6/20/06

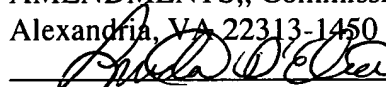


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6-20-06

Linda D'Elia

Dated June 20, 2006